

♠ Practice













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Dashboard > Python > Itertools > Compress the String!

Compress the String! ■



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In this task, we would like for you to appreciate the usefulness of the *groupby()* function of *itertools*. To read more about this function, Check this out.

You are given a string S. Suppose a character 'c' occurs consecutively X times in the string. Replace these consecutive occurrences of the character 'c' with $(X,\ c)$ in the string.

For a better understanding of the problem, check the explanation.

Input Format

A single line of input consisting of the string S.

Output Format

A single line of output consisting of the modified string.

Constraints

All the characters of S denote integers between 0 and 9.

 $1 \leq \mid S \mid \leq 10^4$

Sample Input

1222311

Sample Output

Explanation

First, the character 1 occurs only once. It is replaced by $(1,\ 1)$. Then the character 2 occurs three times, and it is replaced by $(3,\ 2)$ and so on.

Also, note the single space within each compression and between the compressions.



